



Darca Heritage

Eltek

SPECIALIST
DATA LOGGERS

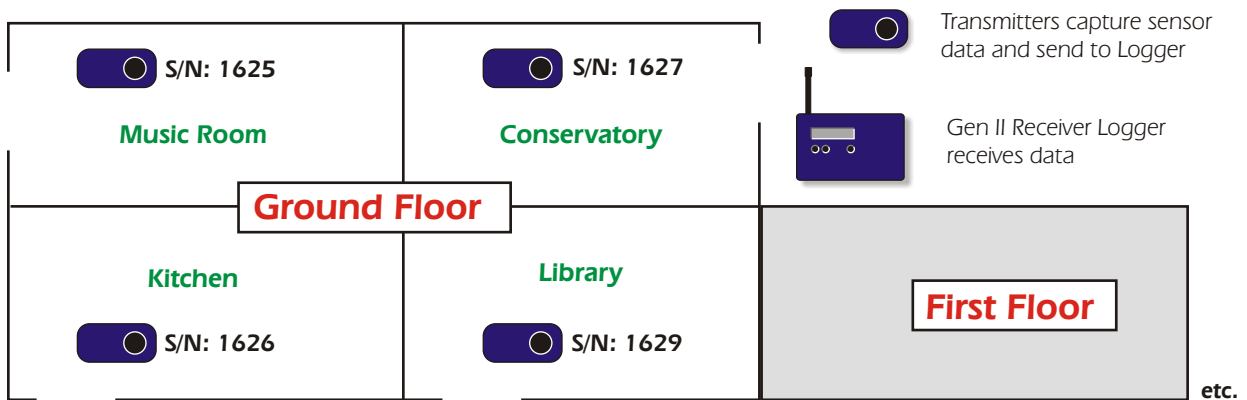
Site-based data acquisition, analysis and reporting software for Eltek Gen II telemetry systems

Darca Heritage has been designed specifically for conservation monitoring on a user-definable 'site', with sensors being referred to according to their physical location. It provides powerful but simple-to-use tools for configuring and metering sensors, changing Data Logger settings, updating site data automatically and analysing it either graphically or statistically.

Additionally, calculated parameters may be added and analysed alongside measured parameters, and sensors may be metered graphically on user-entered floor plans.

Site Overview

- The Site is divided into physical 'Zones', each of which is divided into 'Groups' of Transmitters, e.g.:



Site Setup Features

- Information about Site Layout is entered into Darca's Site Setup window. Each group contains a number of 'Channels':

Group	AT	RH	ST	DPT	Pp	Ps
Music Room	1625	1625				
Kitchen	1626	1626	3242			
Conservatory	1627	1627		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Library	1629	1629				

- Each 'Channel' is of a Parameter Type which may be either a physical sensor or calculated from a formula:

No.	Name	Type	Plot?	Chart			Range			Warn		Alarm	
				No.	Axis	Colour	Min	Max	Units	Min	Max	Min	Max
1	AT	Physical	yes	1	Right	Blue	-8	80	°C	20	60		
2	RH	Physical	yes	1	Left	Red	0	100	%	30	70		
3	ST	Physical	yes	2	Left	Magenta	-5	100	°C	20	60		
4	DPT	Calculated	yes	1	Right	Purple	-5	30	°C				
5	Pp	Calculated	no				0	1000	mb				
6	Ps	Calculated	no				0	4000	mb				
7	AH	Calculated	yes	2	Right	Green	0	20	g/m3			20	80

Formula

Standard Formula Cumulative Formula

(RH*Ps)/100

- The Alarm feature warns if any channel inputs are outside of 'safe' limits. Multiple alarms may be set up and warnings can be set to appear in a variety of ways:

Channel specific alarms:

Warning: Alarm:

Max: Max:

Min: Min:

Warning Plot Style

Not Plotted

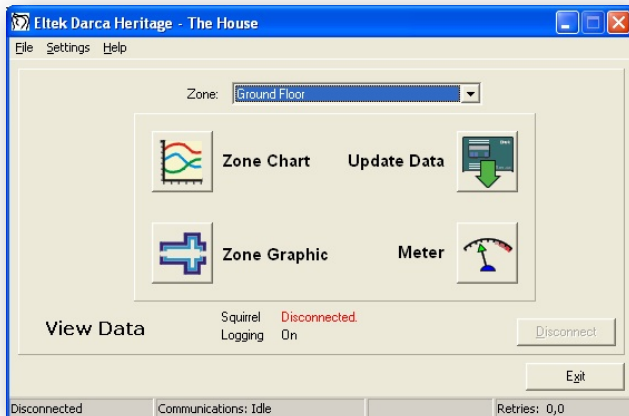
Line: Colour Block:

Alarm Plot Style

Not Plotted

Line: Colour Block:

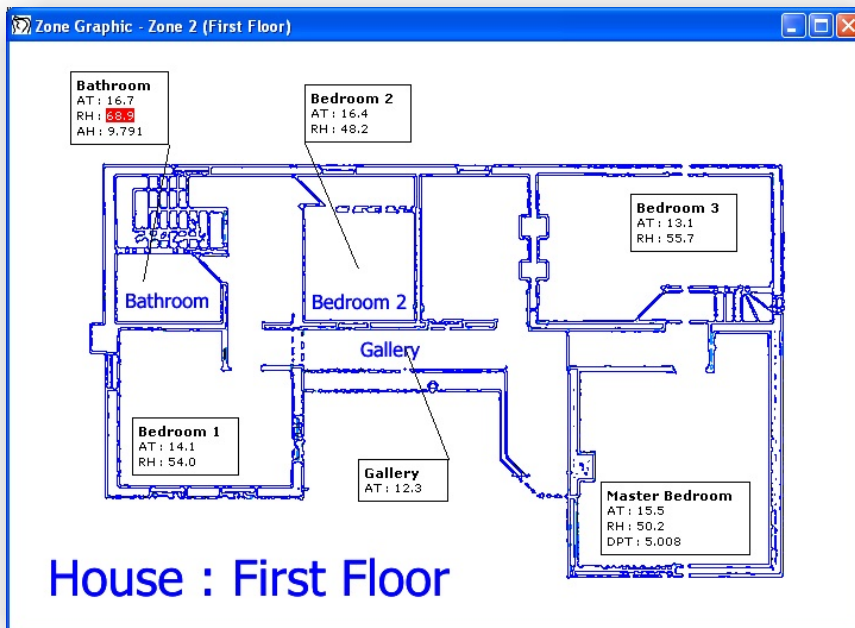
View Data Tools



- Easily jump to all Zones or a specific Zone when Charting or Metering
- Data can be manually updated from the Logger with the 'Update Data' tool, or set to automatically update at a specified interval
- Backup copies of Data and Site files made on every update for security
- Status of Logger is displayed from last connection
- 'Secondary User' installation option which gives only the View Data tools and allows no access to site editing

Real Time Metering

- Data can be metered graphically on user-defined bitmaps which show each group's physical location within a Zone:



- Zone Graphic is a bitmap that can be created in any Windows image editor
- Positions of groups are saved with the Site Setup
- Arrow tool for displaying specific position of group within Zone
- Channels appear highlighted in yellow if outside the warning alarm limits, or in red if outside the main alarm limits
- Text Comments may be added to the graphic
- Multiple Zones can be metered simultaneously on screen

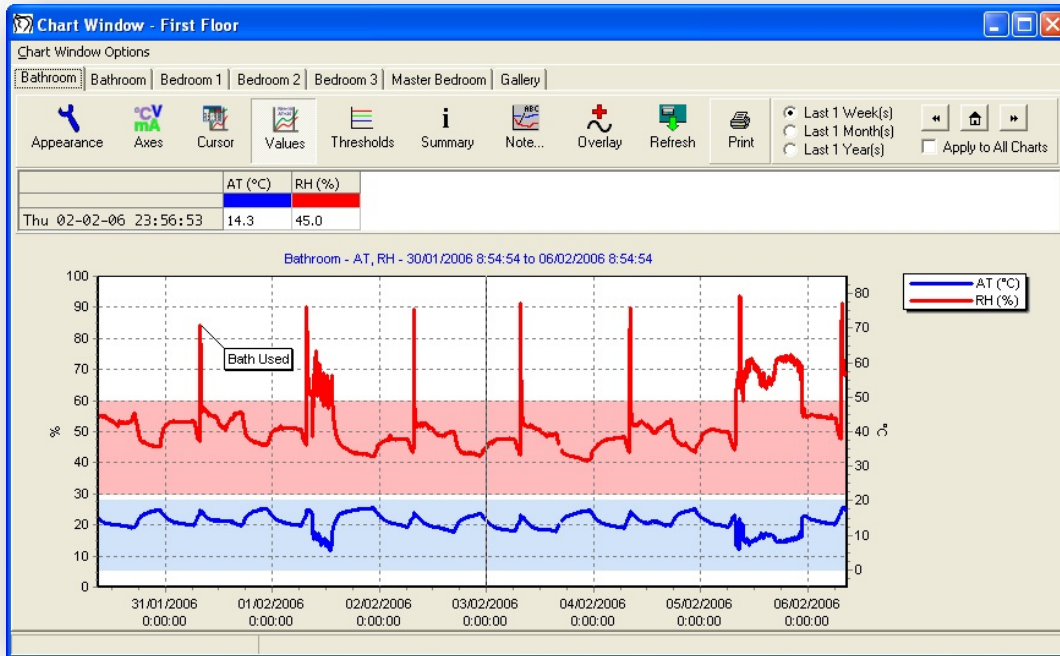
- Alternatively, the Meter Grid displays the metered data in numerical form with the option to view multiple zones simultaneously:

Zone /	Group	AT	RH	ST	DPT	AH
First Floor	Bathroom	16.7	68.9			9.791
First Floor	Bedroom 1	14.1	54.0			
First Floor	Bedroom 2	16.4	48.2			
First Floor	Bedroom 3	13.1	55.7			
First Floor	Master Bedroom	15.5	50.2		5.008	
First Floor	Gallery	12.3				

- The frequency at which the metered readings update is user-definable
- 'Select Zones' tool gives the option to add any Zone from the Site for easy comparison
- Print button prints the metered data

Powerful Charting Tools

- The Chart Window displays all the groups within a Zone on separate tabs:



- Alarm limits appear as dotted lines for each channel
- Channels from any Zone or Group may be overlaid onto the chart
- Top time axis may be added to overlay data from different time periods
- Chart can be scrolled and zoomed, and user-defined 'Time Selector' control flicks between different time periods
- Appearance of titles, axes, plot colours and graph colours is highly customisable
- Cursor control to view raw data of a point on the graph

Chart Data Summary

- Summary window displays all data in current graph view (data from other Zones and Groups can be added for comparison):
- Many different statistics can be displayed about the current graphed data including time spent in alarm:

Date and Time	Rdg No.	AT (2) °C	RH (3) %
30/01/2006 08:55:08	1	15.1	55.2
30/01/2006 08:57:08	2	15.0	55.3
30/01/2006 08:59:08	3	15.0	55.4
30/01/2006 09:01:08	4	14.9	55.2

- Information in summary window can be copied to the clipboard or printed
- 'Find' tool speeds up navigation when searching for a particular time stamp or reading

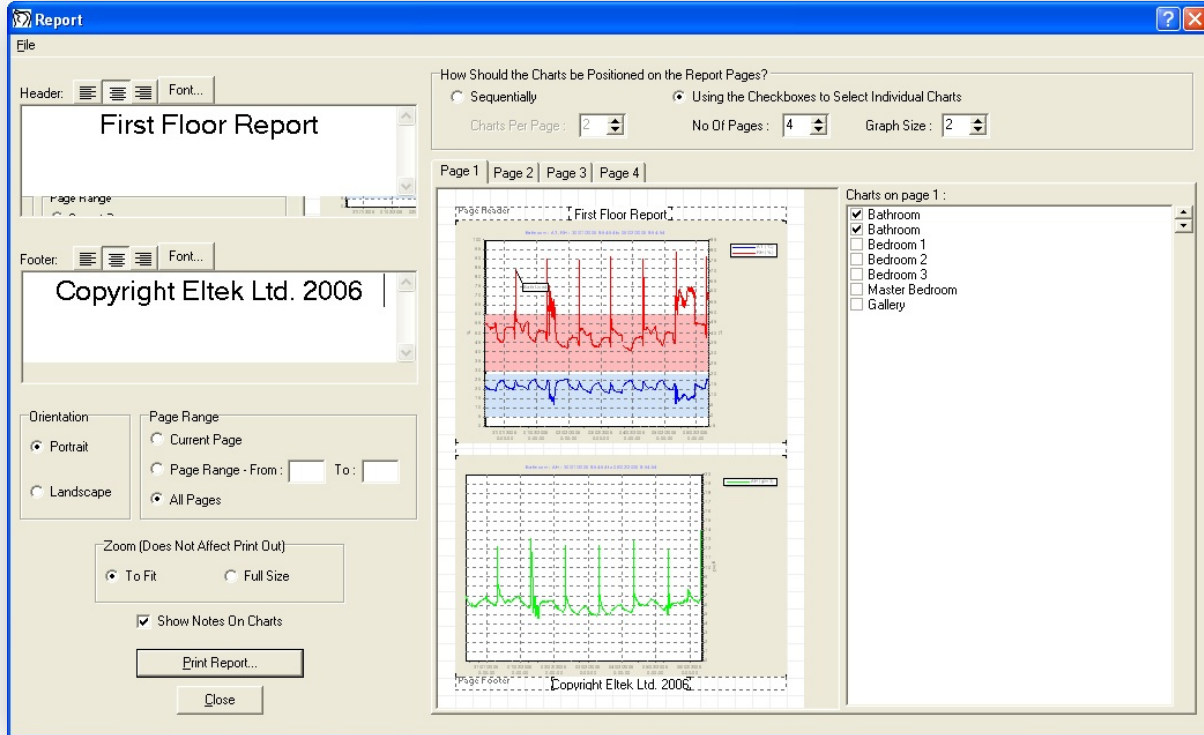
Channel	AT (°C)	RH (%)
Start Of Data	30/01/2006 08:55:08	30/01/2006 08:55:08
End Of Data	06/02/2006 08:54:53	06/02/2006 08:54:53
Data		
Valid Data	5013	5013
Max Value	18.0	93.8
Time Of 1st Max	06/02/2006 07:40:53	05/02/2006 08:50:53
Min Value	5.8	40.7
Time Of 1st Min	01/02/2006 12:54:53	03/02/2006 22:32:53
Average	13.736	51.826
Sum	68858.2	259802.9
Std. Deviation	2.452	8.154
Alarms		
Main Alarm (Physical) - Range		
Readings Within Thresholds	0 - 20	30 - 60
	5013	4347
Time Within Thresholds	6 Days, 23:59:44	6 Days, 01:11:44
% Time Within Thresholds	100.0%	86.428%
Total Readings In Alarm	0	666
Total Time In Alarm	00:00:00	21:38:00
% Total Time In Alarm	0.0%	12.877%



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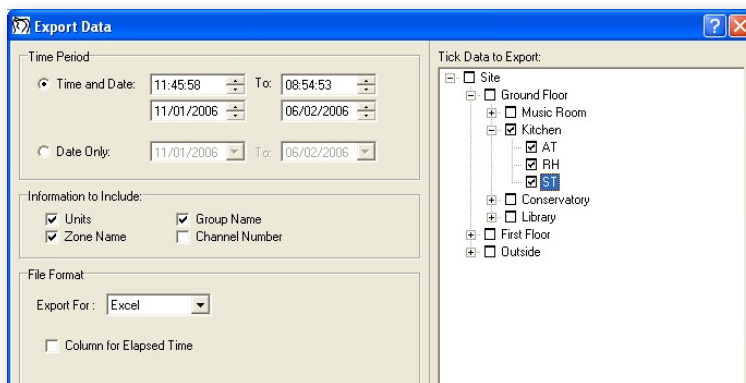
Remote control, Download and Analysis Software for
Conservation Monitoring with Eltek Gen II Telemetry Systems

Reporting



- Graphs of the groups within a zone can be compiled into a report for printing or saving for future reference
- Headers and Footers can be added to the report
- Size of chart and the layout of the charts on the Report pages can be fully customised
- Initial 'Sequential' layout for fast and simple Report setup
- Report 'Templates' can be saved for each zone, storing layout and Header/Footer information
- Opening a saved Report also displays the Chart Window for the relevant Zone and time period

Export Data Tool for Advanced Analysis



- Data from any Groups / Zones from any time period can be exported to raw data file
- Advanced analysis can be performed in spreadsheet

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